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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
|-----------------|-------------|----------------------|---------------------|

09/28/99 08/26/99 YOSHIOKA

8 35.08745-CJP

EXAMINER

005514 MMC2/1107
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30 ROCKEFELLER PLAZA
NEW YORK NY 10112

ART UNIT: M

PAPER NUMBER

DATE MAILED:

11/07/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/384,326

Applicant(s)

Yoshioka et al.

Examiner

M. Day

Group Art Unit

2879



☒ Responsive to communication(s) filed on Oct 10, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-67 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☒ Claim(s) 1-42 is/are allowed.

☒ Claim(s) 43-67 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☒ received in Application No. (Series Code/Serial Number) 07/218,203.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. Amendment A, filed October 10, 2000, has been received, and overcomes the rejection of claims 51-64 are rejected under 35 U.S.C. 112, second paragraph, and the rejection of claims 43-55 under the judicially created doctrine of obviousness-type double patenting.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper extension of the exclusionary right granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 56-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, and 4 of U.S. Patent No. 5,066,883 by Yoshioka et al. in view of U.S. Patent No. 3,735,186 by Klopfer, et al., further in view of U.S. Patent No. 4,575,765 by Hirt. Referring to claims 56, and 57, Yoshioka et al. ('883) recites in claim 1 an electron-emitting device substantially as presently recited. Yoshioka et al. ('883) recites in claims 1, 3, and 4 an electron-emitting device including a laminate having an insulating layer disposed

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between opposing electrodes and in claim 3 the device includes a layer of electron emitting material interposed in the insulating layer. Consequently, the insulating layer constitutes an electron emissive layer extending between surfaces of the first and second electrodes, as recited in the instant claim 56. The principle difference is that the instant claim is directed to a display device including the electron source. It is well known to include an electron source in a display device, as evidenced by Klopfer, et al. Klopfer et al. disclose a display device substantially as claimed (see FIG. 7, 8) including an electron source (see FIG. 5), a fluorescent plate having a substrate 34, a fluorescent layer 33, an accelerating electrode 32, and a vacuum housing (see col. 4, lines 2-10). It would have been obvious to include the electron source, as disclosed by Yoshioka et al., instead of the electron source, as disclosed by Klopfer, et al. because the two sources are art recognized equivalents for producing electrons.

Still referring to claims 56, and 57, Yoshioka et al. recite in claim 1 a voltage (scan signal) applied to opposing electrodes. Yoshioka et al. do not claim a means for applying the scan signal and a modulating signal to the column wires corresponding to the scanned electron emission elements. It is the position of the examiner, however, that matrix addressing of electron emitters is well known and conventional in the art, as evidenced by Hirt. See col. 3, lines 46-52. It would have been obvious to matrix address, as disclosed by Hirt, the emitters, as disclosed by Yoshioka et al. because such an addressing scheme is conventional.

Claim 58 is rejected over claim 3 of U.S. Patent No. 5,066,883.

Claim 59 is rejected over claim 4 of U.S. Patent No. 5,066,883.

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Referring to claim 60, the specification of an accelerating voltage is within the skill of the art.

Claim 61 is rejected for the same reason as claim 56.

Referring to claim 62, it is noted that claim 1 of U.S. Patent No. 5,066,883 is directed to an electron emitting device comprising a laminate. It is the position of the examiner that a laminate would intrinsically have "roughly parallel" first and second electrodes.

Referring to claims 63, Yoshioka et al. recite in claim 1 a voltage (scan signal) applied to opposing electrodes.

Referring to claim 64, the specification of an optimum voltage is within the skill of the art.

Referring to claim 65 and 66, display devices conventionally include grid electrodes as evidenced by Klopfer et al.'s strip electrodes 41. See FIG. 8. Such a device would intrinsically include connectors extending through the vacuum housing for the purpose of providing electrical communication with the grid conductors, as required for the display of video.

Referring to claims 67, Yoshioka et al. recite in claim 1 a voltage (scan signal) applied to opposing electrodes. Consequently, claim 1 of Yoshioka et al. implicitly includes a signal applier.

Oath/Declaration

4. The reissue oath/declaration filed with this application is defective because the error which is relied upon to support the reissue application is not an error upon which a reissue can be based.

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See 37 CFR 1.175(a)(1) and MPEP § 1414. On page three of the declaration, the applicant alleges that "the invention as defined in those claims [new claims 43-63] could and should have been claimed by the inventors." It is the examiner's position that reissue claims must be for the same general invention. It is noted that all of the independent claims (1, 15, 27 and 36) of U.S. patent 5,661,362 are directed to a device wherein the electron-emitting device has no overlapping structure. It is further noted that the new claims 43-63 are directed to electron-emitting devices having overlapping structure, i.e., vertical type structure, or laminate structure. Consequently, the examiner concurs with the applicant's allegation, i.e., the invention as defined in the new claims 43-63 could and should have been claimed by the inventors. The error which is relied upon to support the reissue application, however, is not an error upon which a reissue can be based. Rather, reissue claims must be for the same general invention. See MPEP 1412.01.

5. Claims 43-50 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

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Recapture of Cancelled Subject Matter

6. Claims 43-50 are rejected under 35 U.S.C. 251 as being an improper recapture of claimed subject matter deliberately canceled in the application for the patent upon which the present reissue is based. As stated in *Ball Corp. v. United States*, 221 USPQ 289, 295 (Fed. Cir. 1984):

The recapture rule bars the patentee from acquiring, through reissue, claims that are of the same or broader scope than those claims that were canceled from the original application.

7. Claims 43-67 are directed to devices including laminate electron sources. The original claims 67-95 were similarly directed to devices including laminate electron sources. The original claims 67-95, however, were cancelled in paper number 28 to obviate the rejection of the claims under the judicially created doctrine of obviousness-type double patenting as obvious over claims 1-38, and 40-49 of U.S. Patent No. 5,066,883 by Yoshioka et al. in view of U.S. Patent No. 3,735,186 by Klopfer, et al. The original claims 67-95 were cancelled without prejudice or disclaimer of the subject matter to preserving the right to file a divisional application. Deliberate cancellation of claims cannot ordinarily be considered an error within the scope of the intended meaning of 35 USC 521. Accord. *In re Orita, Yahagi, and Enomoti* (CCPA) 193 USPQ 145. That is to say, reissue cannot be used to circumvent the copendency requirements of 35 USC 120, and 121.

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Response to Arguments

8. Referring to page 23 of Amendment A, filed October 10, 2000, the applicant alleges that claims 56-67 are directed to a device including an intermediate member disposed on the first electrode, and having a side wall which includes an electron emissive layer containing an electrical discontinuity, ... wherein the electron-emission layer extends from the first electrode to the second electrode. The examiner respectfully disagrees. Rather, claim 56 is directed to an electron emissive layer extending between a surface of the first and second electrodes. It is evident to the examiner that the subject claim encompasses laminate emissive layers, such as recited in claims 1, 3, and 4 in U.S. Patent No. 5,066,883 by Yoshioka et al. Yoshioka et al. ('883) recites in claims 1, 3, and 4 an electron-emitting device including a laminate having an insulating layer disposed between opposing electrodes, and in claim 3 the device further includes a layer of electron emitting material interposed in the insulating layer. Consequently, the insulating layer, as disclosed in '883, can be reasonably construed as constituting an electron emissive layer extending between surfaces of the first and second electrodes, as recited in the instant claim 56.

Allowable Subject Matter

9. Claims 1-42 are allowed over the prior art of record.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Day whose telephone number is 703/305-4941. The examiner can normally be reached on Monday-Friday, from 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel, can be reached by phoning 703/305-4794. The Fax phone number is 703/308-7382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 703/308-0956.

November 3, 2000



**MICHAEL DAY
PRIMARY EXAMINER
GROUP 2800**